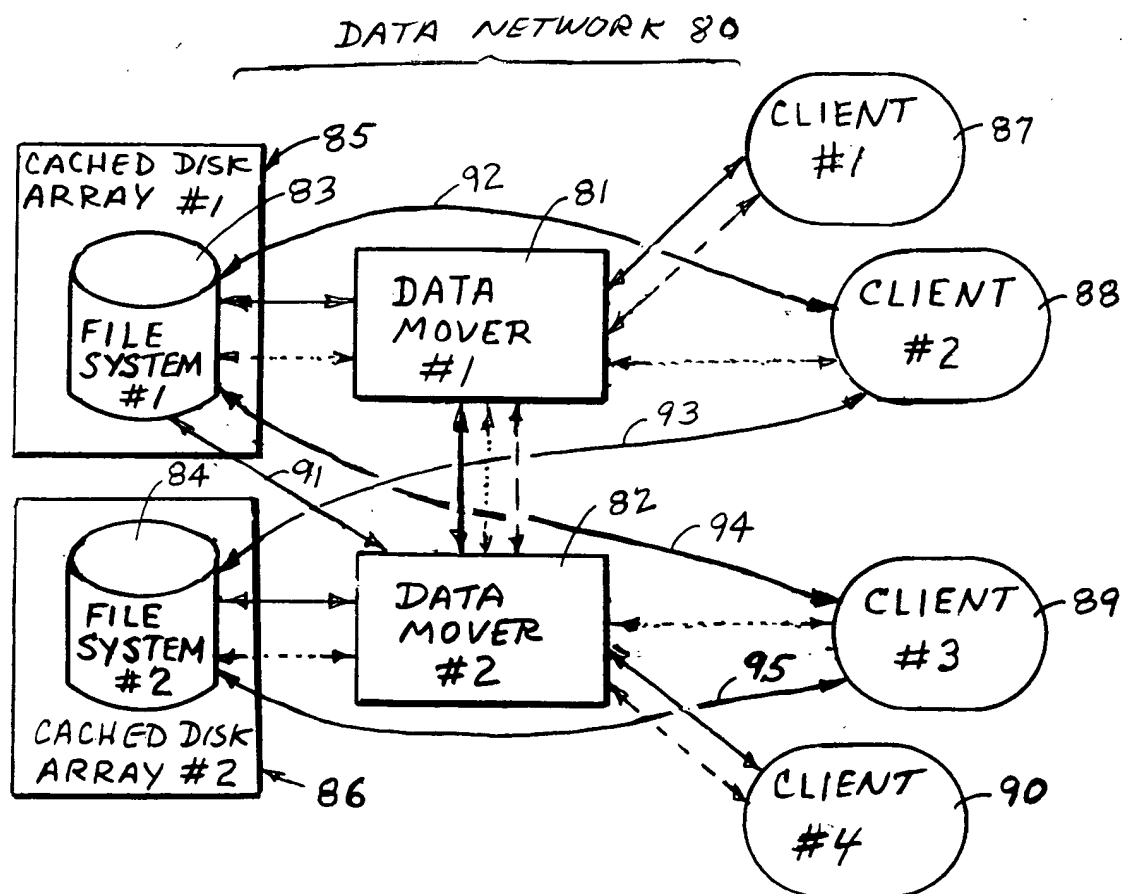


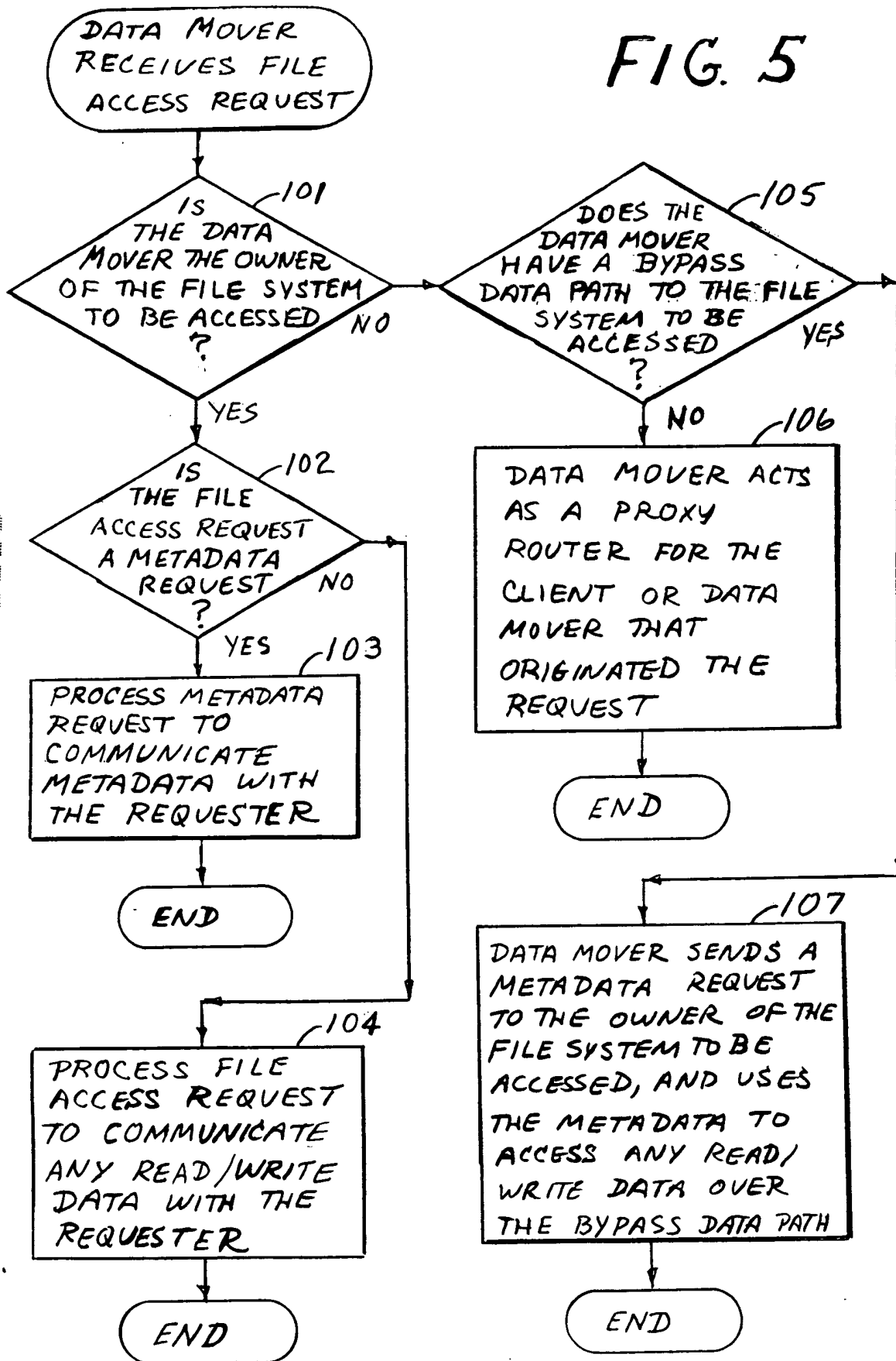
FIG. 1 (PRIOR ART) is a block diagram of a file server system. A bracket at the top labels the entire system as "FILE SERVER 20". Inside this bracket, on the left, is a "CACHED DISK ARRAY 25" containing two cylinders labeled "FILE SYSTEM #1" (23) and "FILE SYSTEM #2" (24). To the right of the array are two rectangular blocks labeled "DATA MOVER #1" (21) and "DATA MOVER #2" (22). Bidirectional arrows connect each file system to its corresponding data mover. A vertical double-headed arrow connects the two data movers. To the right of the data movers is a bracket labeled "DATA NETWORK 30". "DATA MOVER #1" (21) is connected to "CLIENT #1" (26) via "DATA" (solid arrow) and "CONTROL" (dashed arrow) lines. "DATA MOVER #2" (22) is connected to "CLIENT #2" (27) via "DATA" (solid arrow) and "CONTROL" (dashed arrow) lines. Small vertical rectangles labeled 28 and 29 are shown on the right side of the data mover blocks.

FIG. 2

FIG. 2

[illegible]

# FIG. 5



SECRET 030399

SMB MESSAGE

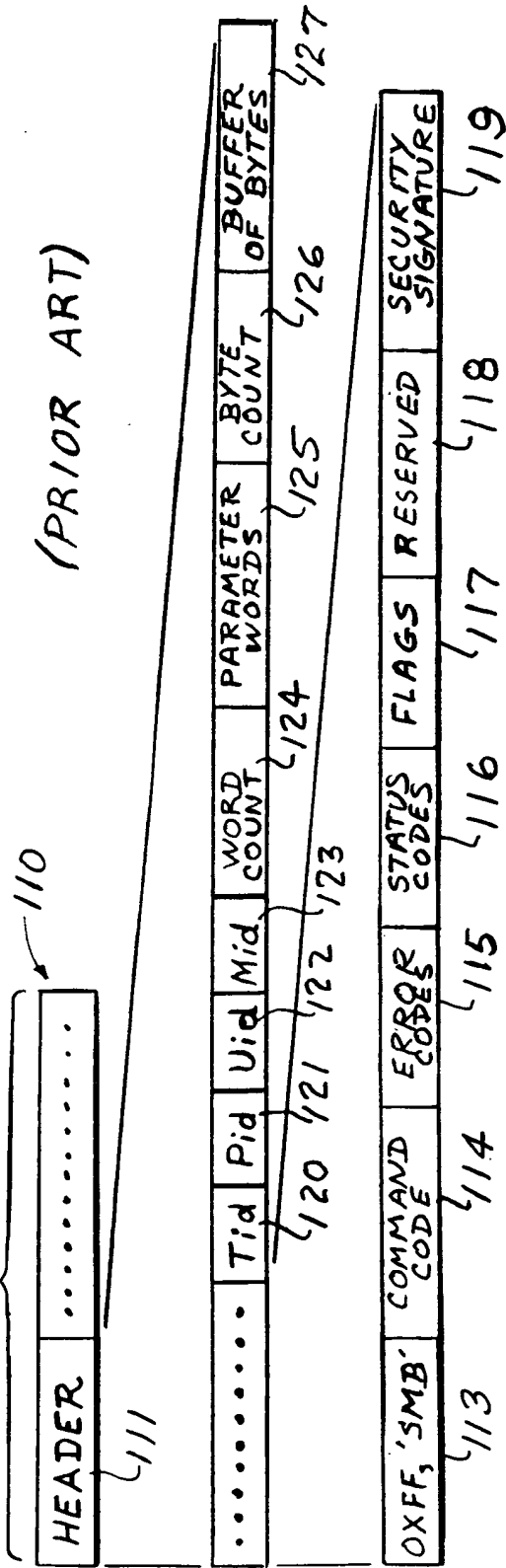


FIG. 6

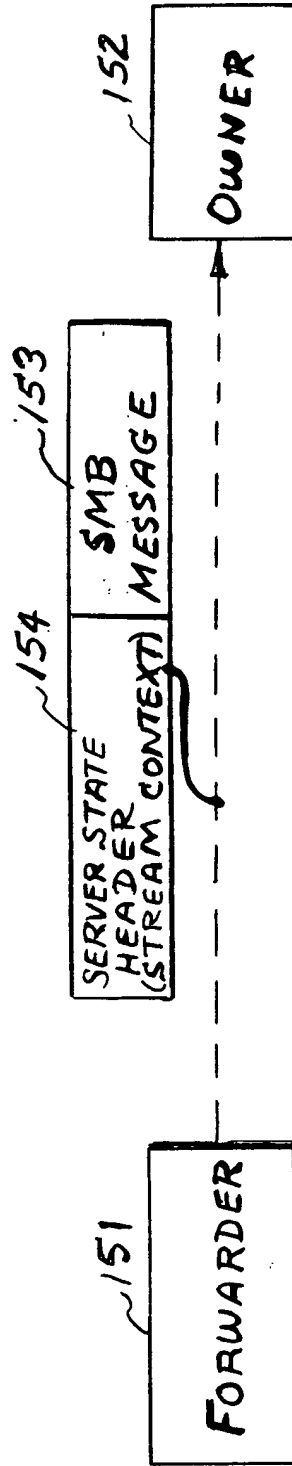


FIG. 8

FORWARDER

OWNER

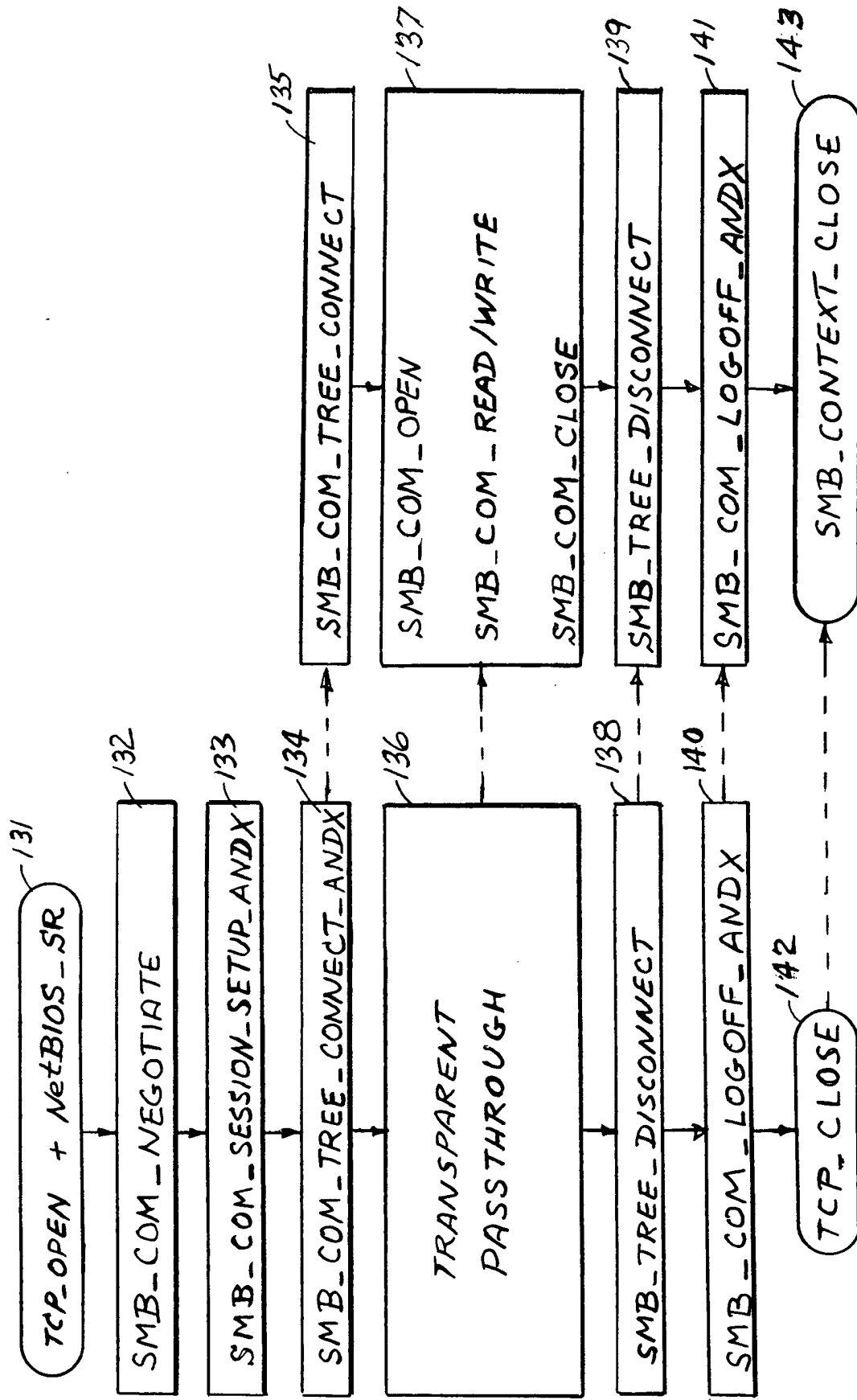


FIG. 7

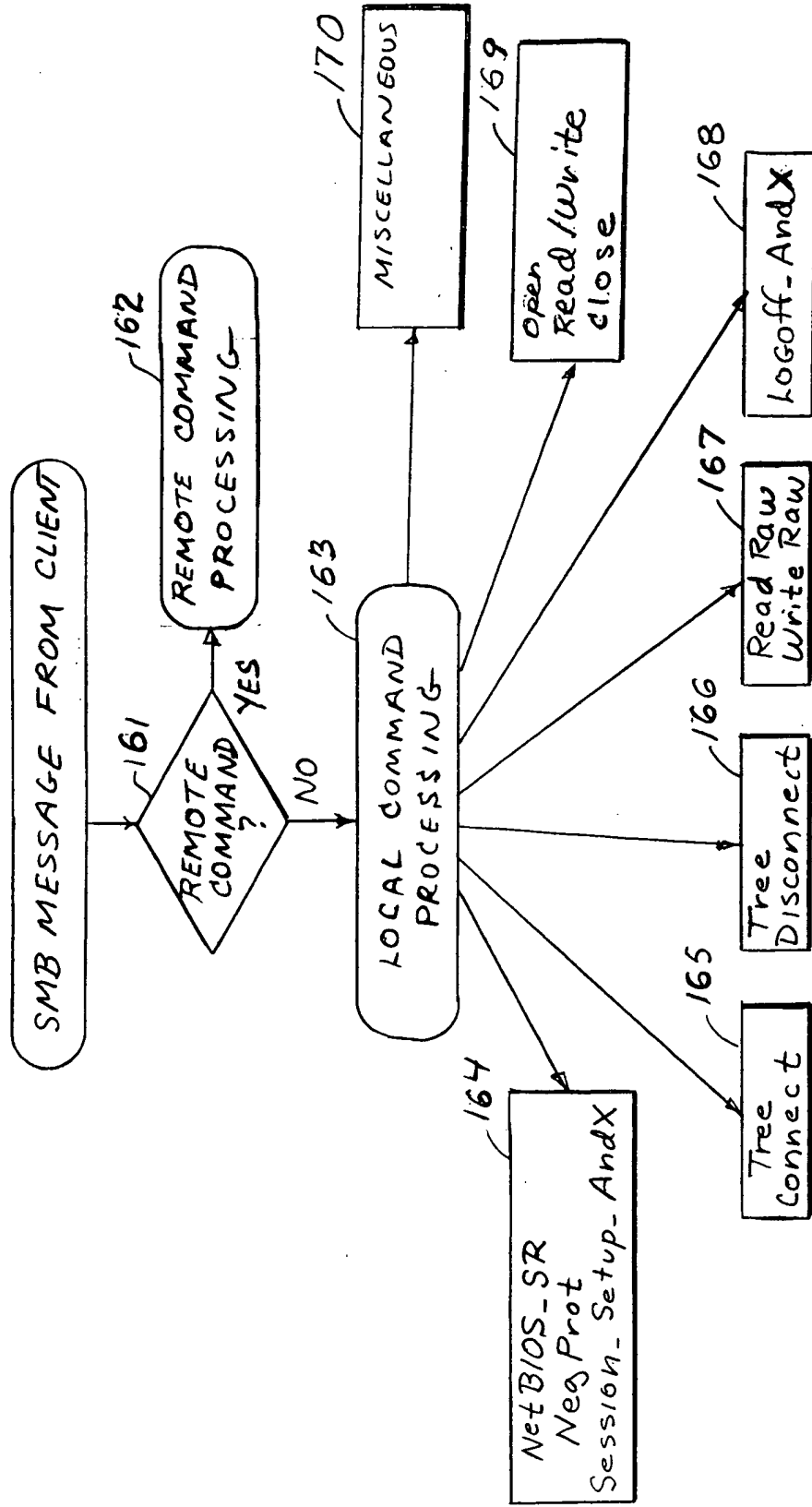


FIG. 9

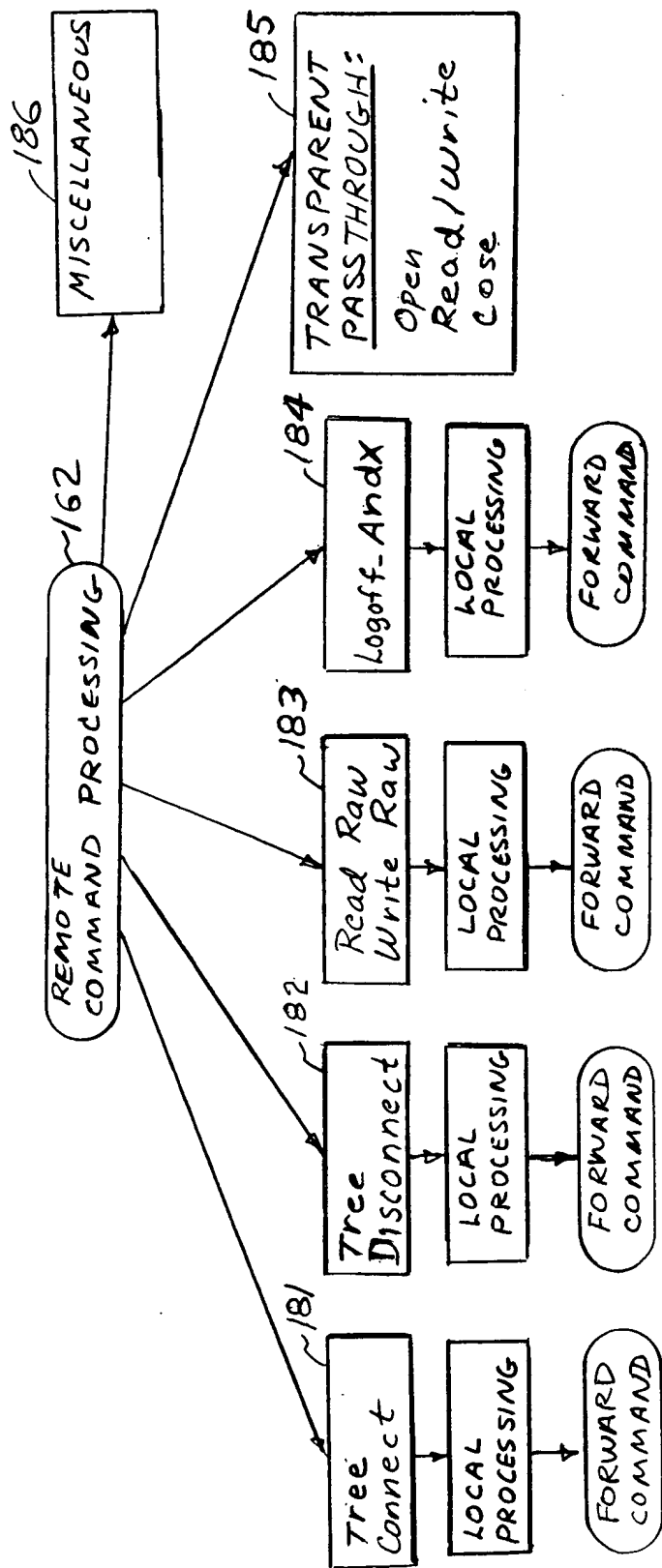


FIG. 10

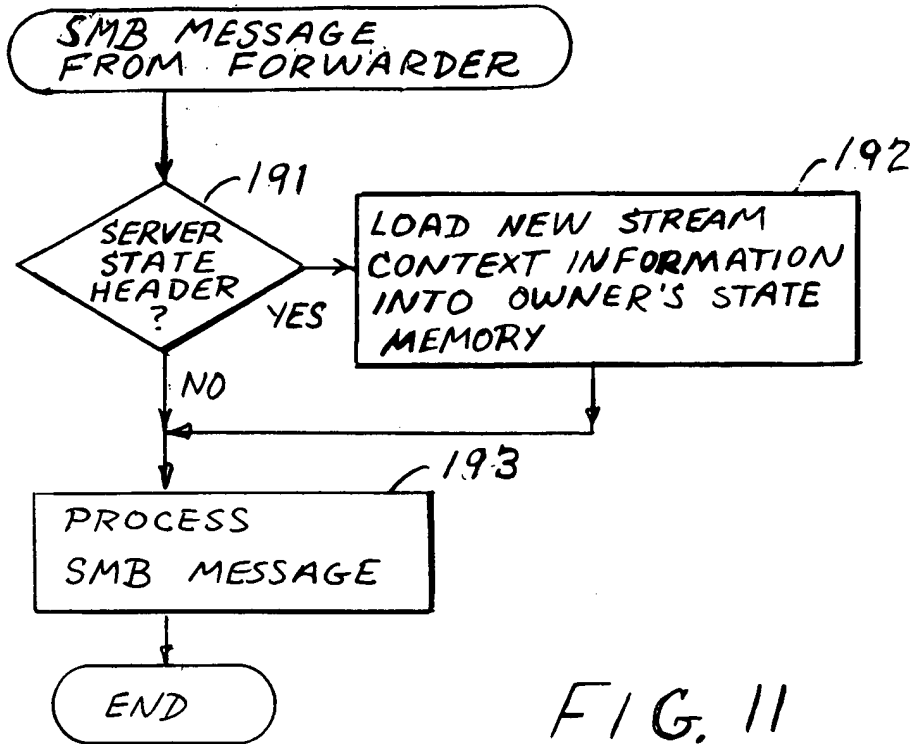


FIG. 11



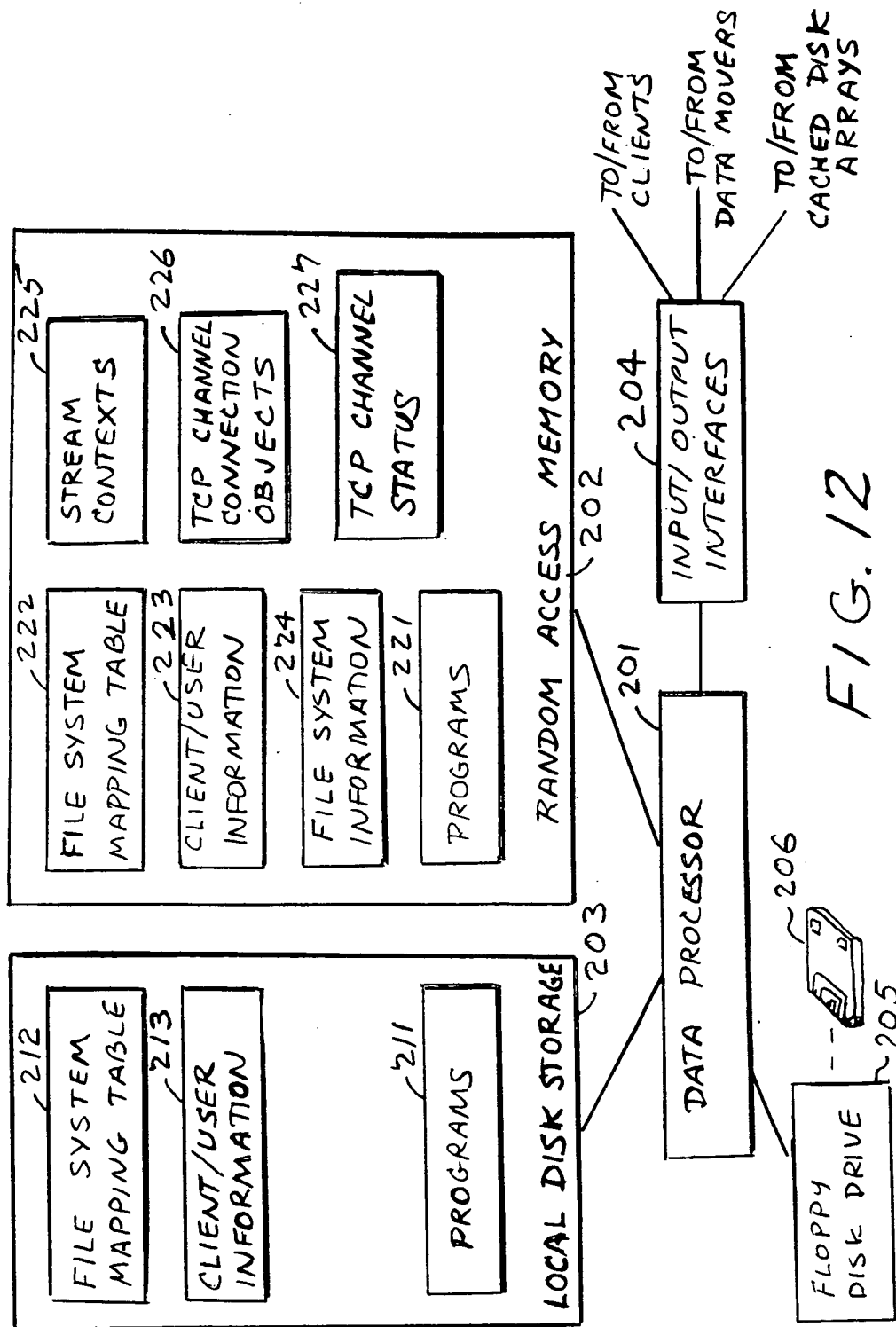


FIG. 12

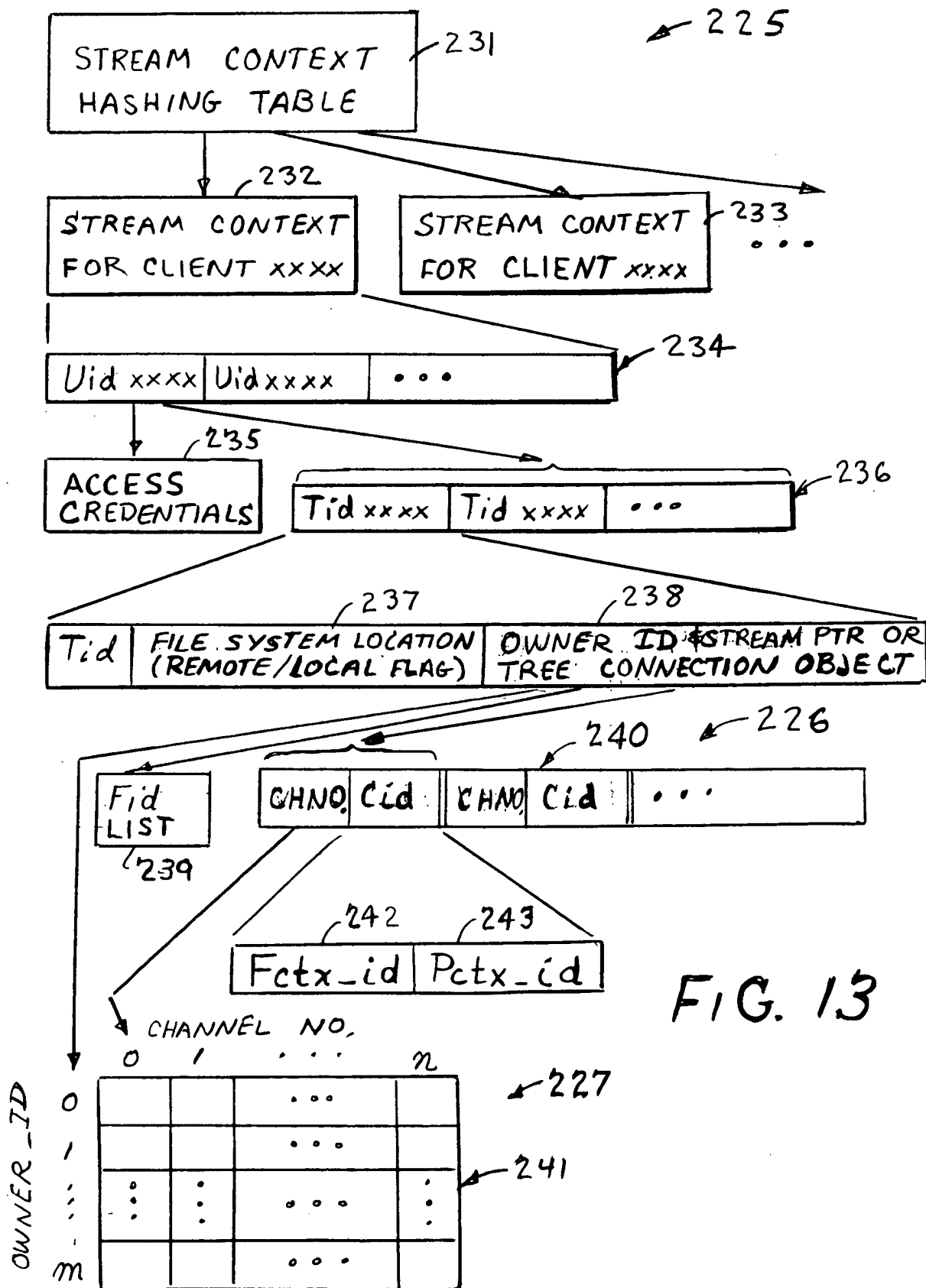


FIG. 13

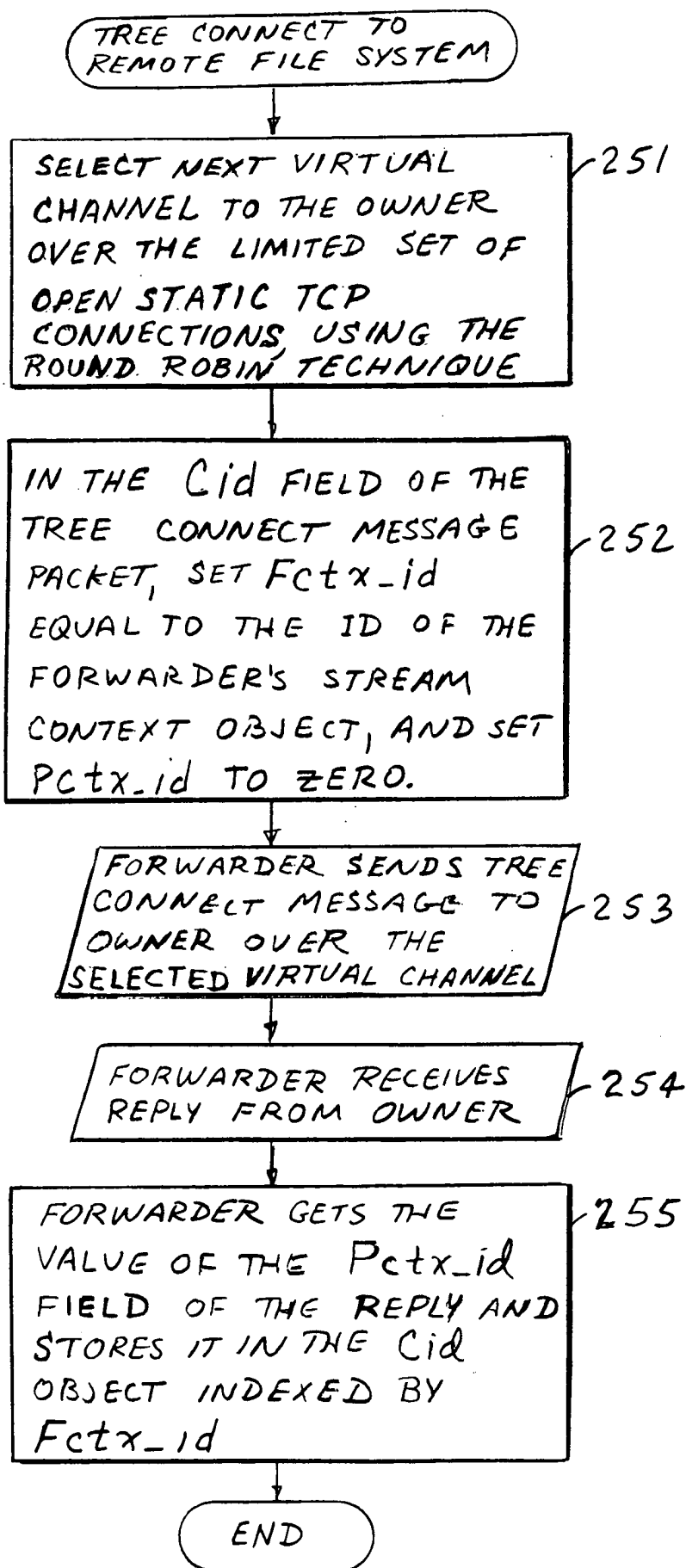


FIG. 14

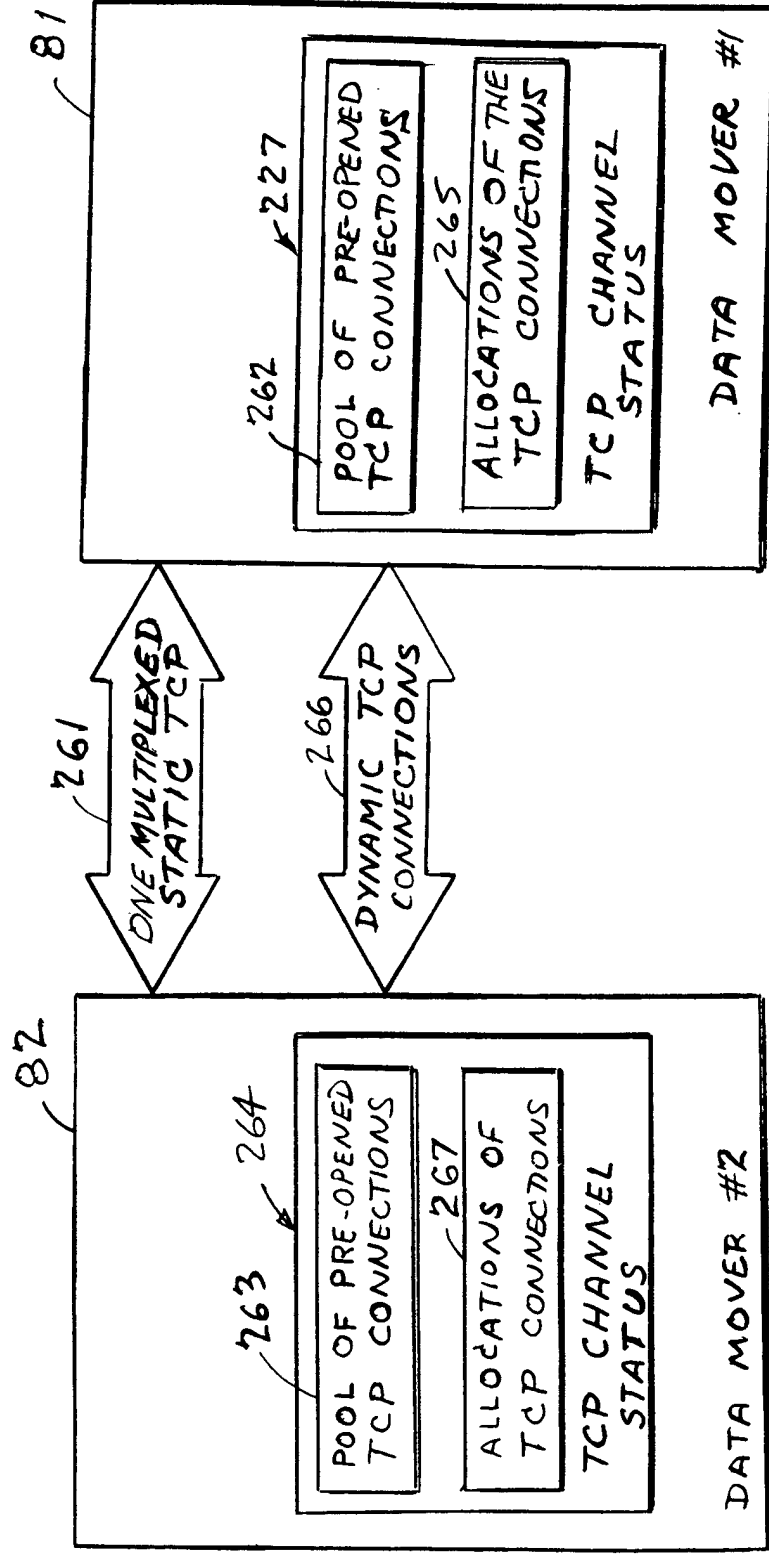


FIG. 15

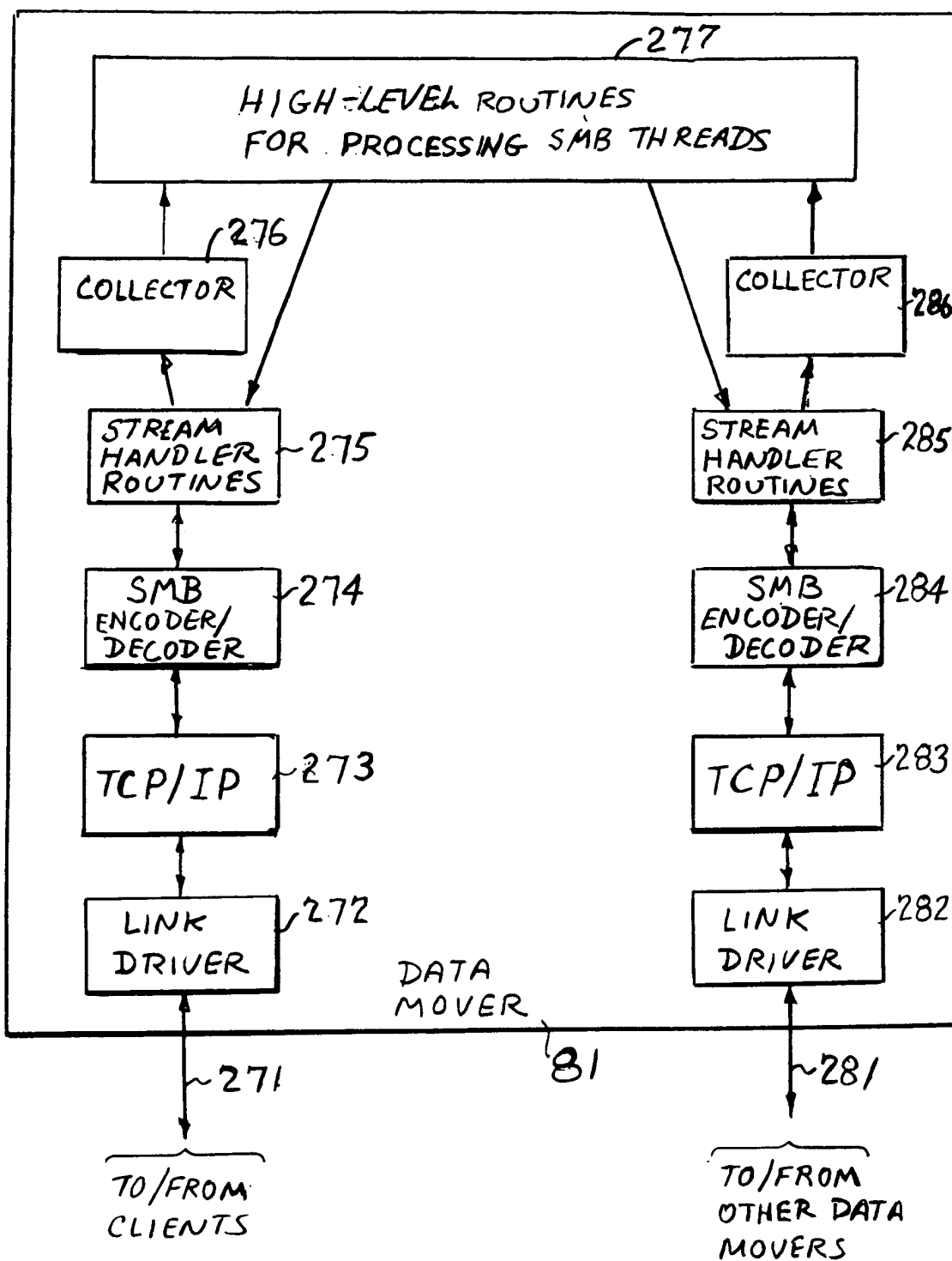
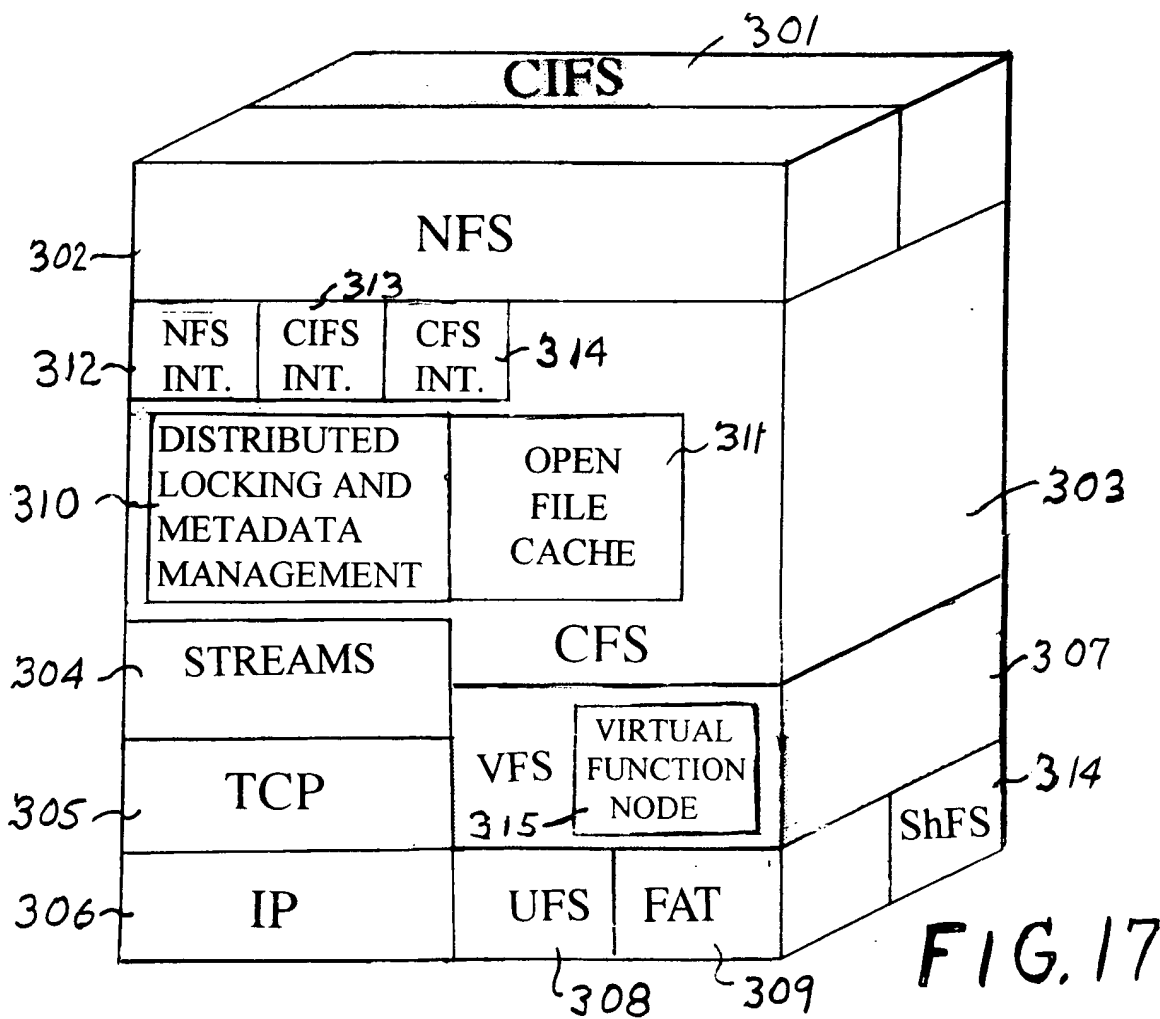


FIG. 16



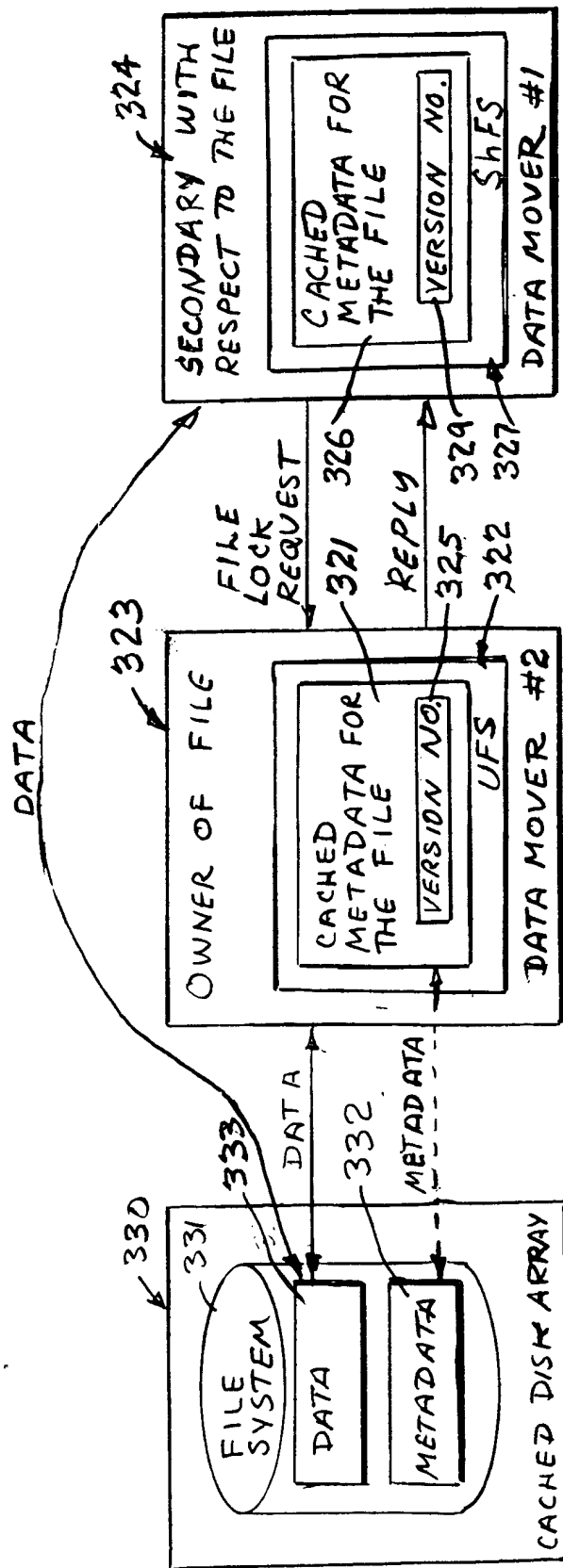


FIG. 18

```

graph TD
    Start([DISTRIBUTED LOCKING AND METADATA MANAGEMENT]) --> 341[OWNER RECEIVES A FILE LOCK REQUEST FROM A SECONDARY DATA MOVER]
    341 --> 342{IS OWNER READY TO GRANT LOCK?}
    342 -- NO --> 343[CONTINUE]
    343 --> 342
    342 -- YES --> 344{IS OWNER'S METADATA VERSION NO. = VERSION NO. FROM THE SECONDARY DATA MOVER?}
    344 -- YES --> 345[/RETURN TO THE SECONDARY DATA MOVER JUST A LOCK GRANT/]
    345 --> End([CONTINUE])
    344 -- NO --> 346[/RETURN TO THE SECONDARY DATA MOVER A LOCK GRANT AND THE NEW METADATA INCLUDING THE OWNER'S VERSION NUMBER/]
    346 --> End

```

FIG. 19



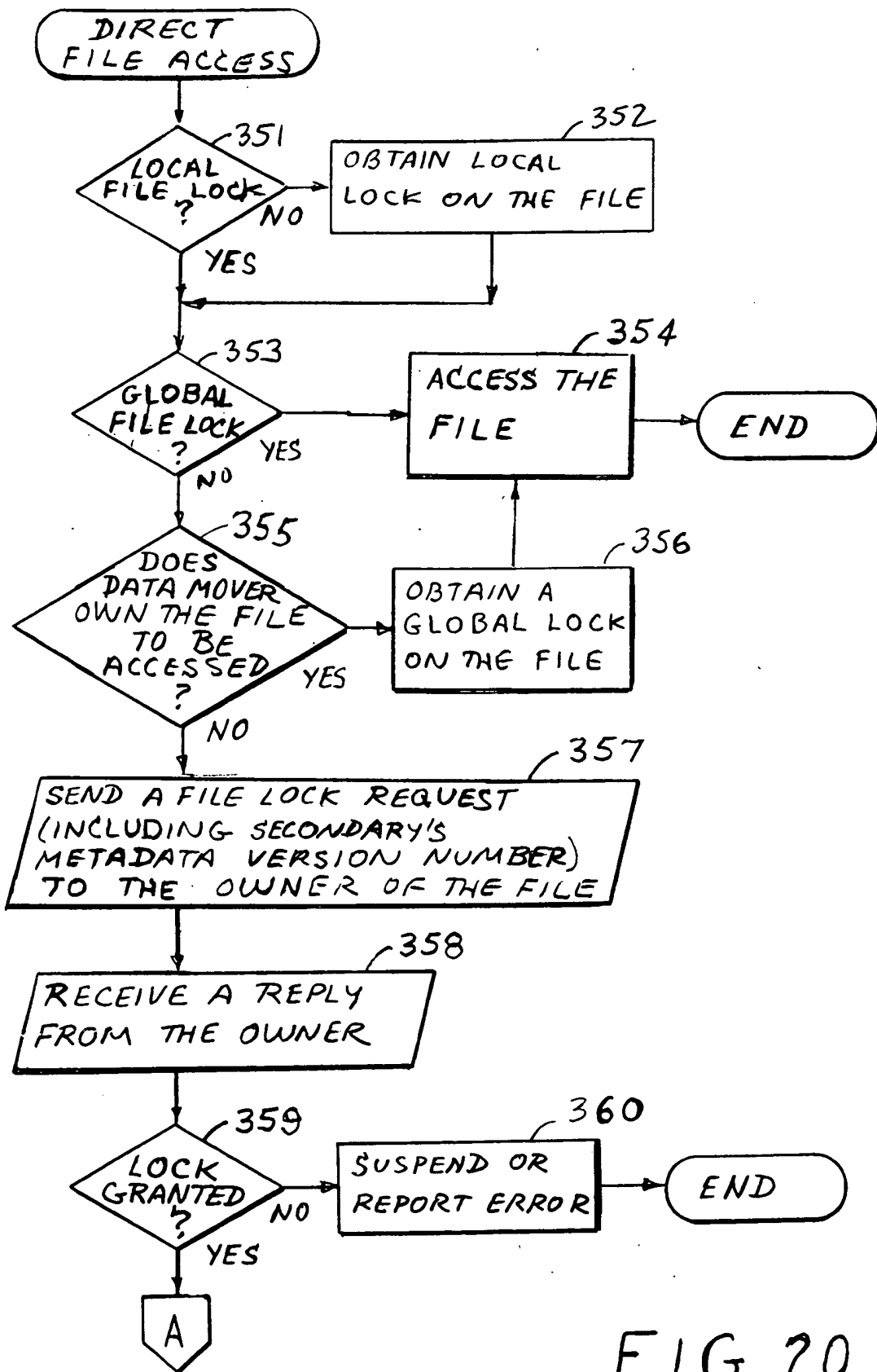


FIG. 20

TO FIG. 21

FROM FIG. 2

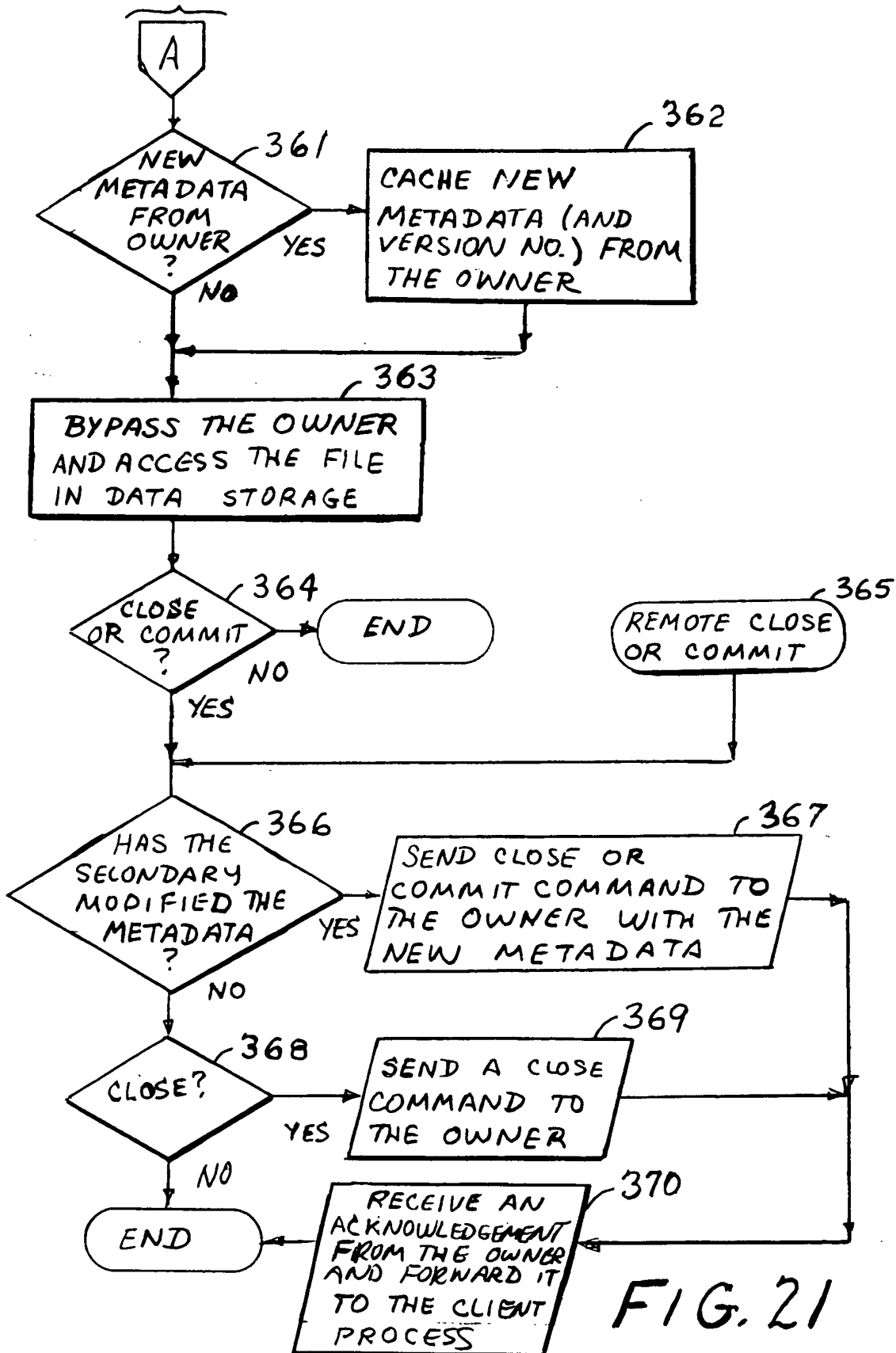


FIG. 21

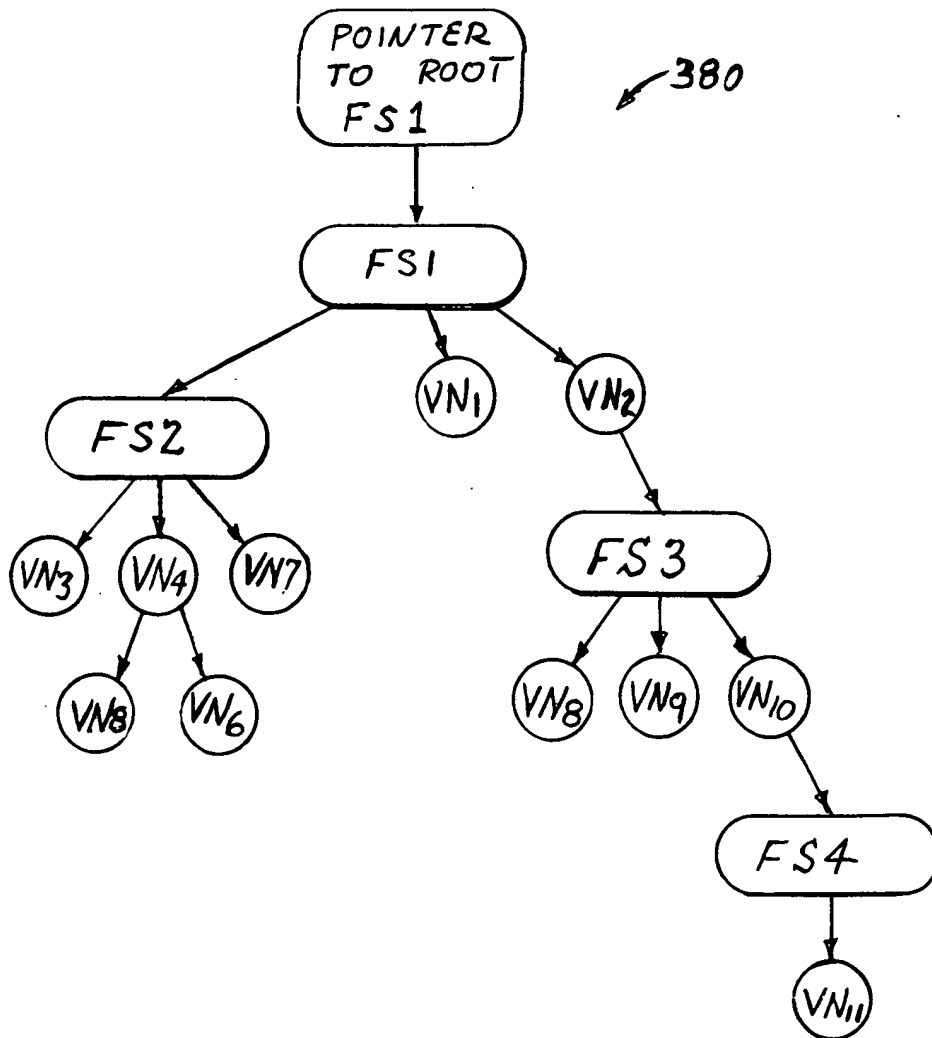


FIG. 22

(PRIOR ART)

The diagram illustrates a linked list structure. At the top, a box labeled "POINTER TO HEAD OF SFS LIST" points to a block labeled "SFS1". Below "SFS1" is "SFS2", then "SFS3", and finally "SFS4". Each SFS block is connected to a sequence of nodes labeled "SN". "SFS1" points to "SN1", which points to "SN2". "SFS2" points to "SN3", which points to "SN4", which points to "SN5", which points to "SN6", which points to "SN7". "SFS3" points to "SN8", which points to "SN9", which points to "SN10". "SFS4" points to "SN11". Arrows labeled 390, 391, 392, 393, 394, and 395 point to various parts of the diagram, including the pointer box, the SFS blocks, and the SN nodes.

FIG. 23

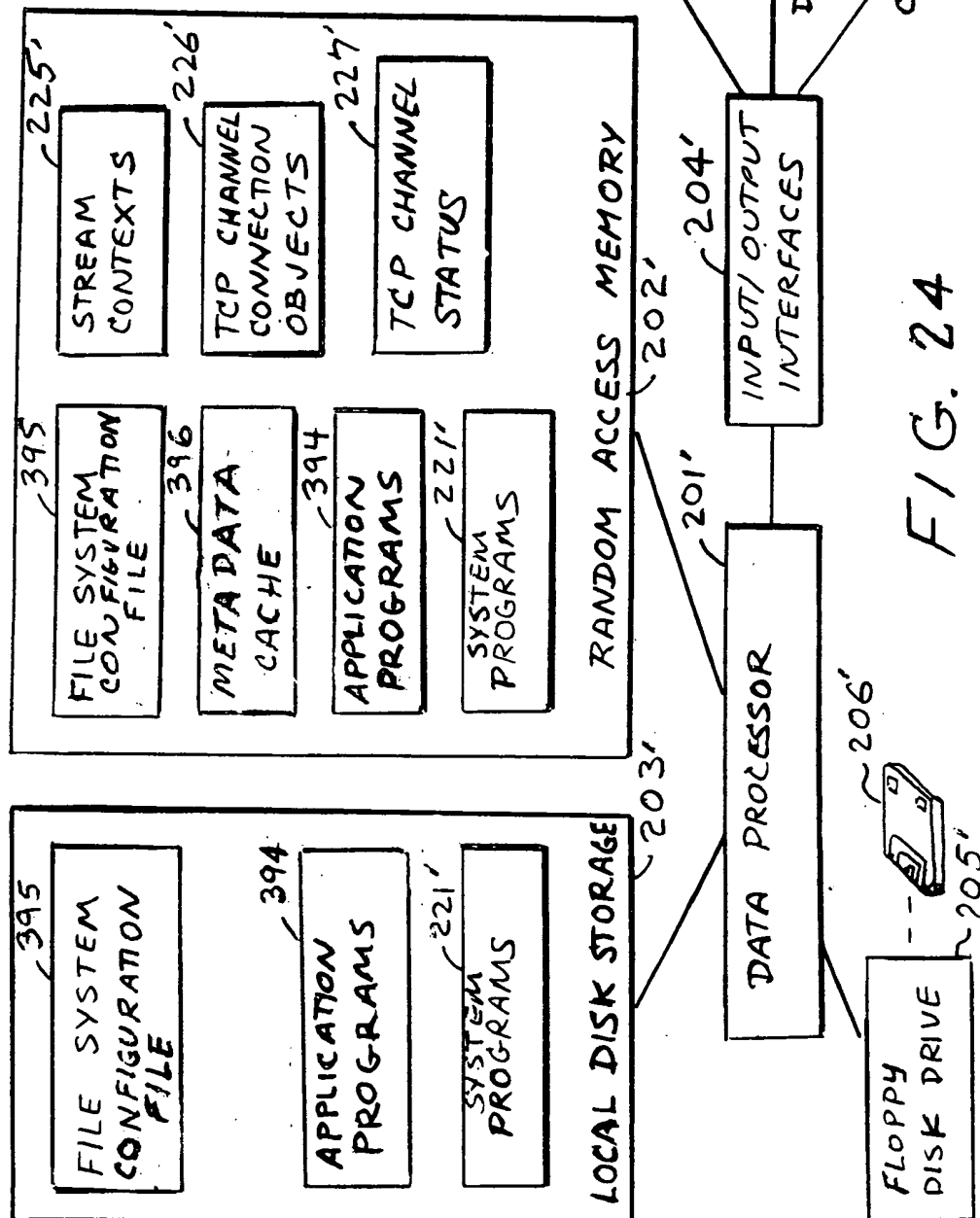
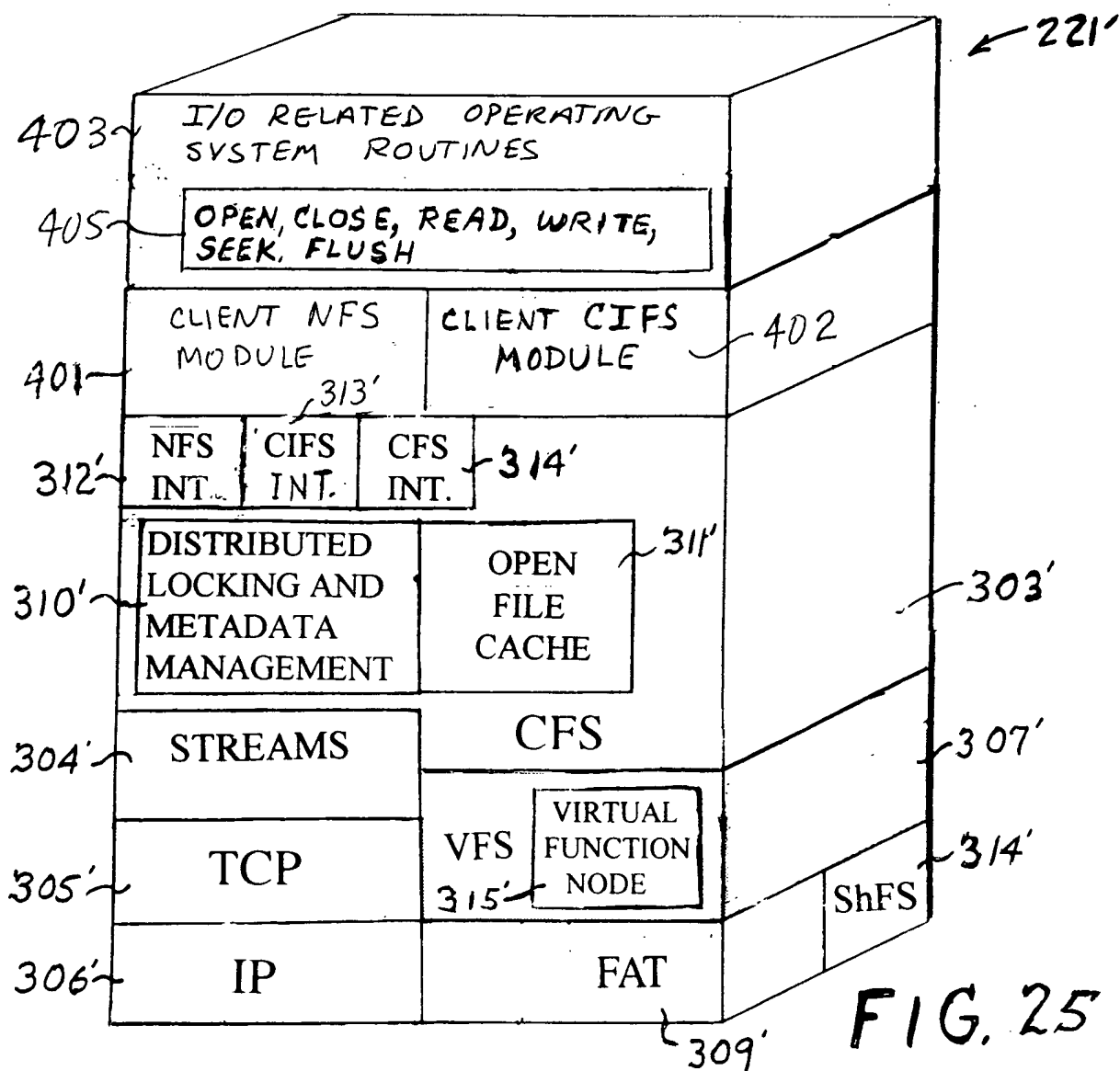


FIG. 24

09261621.030399



09261621.030399

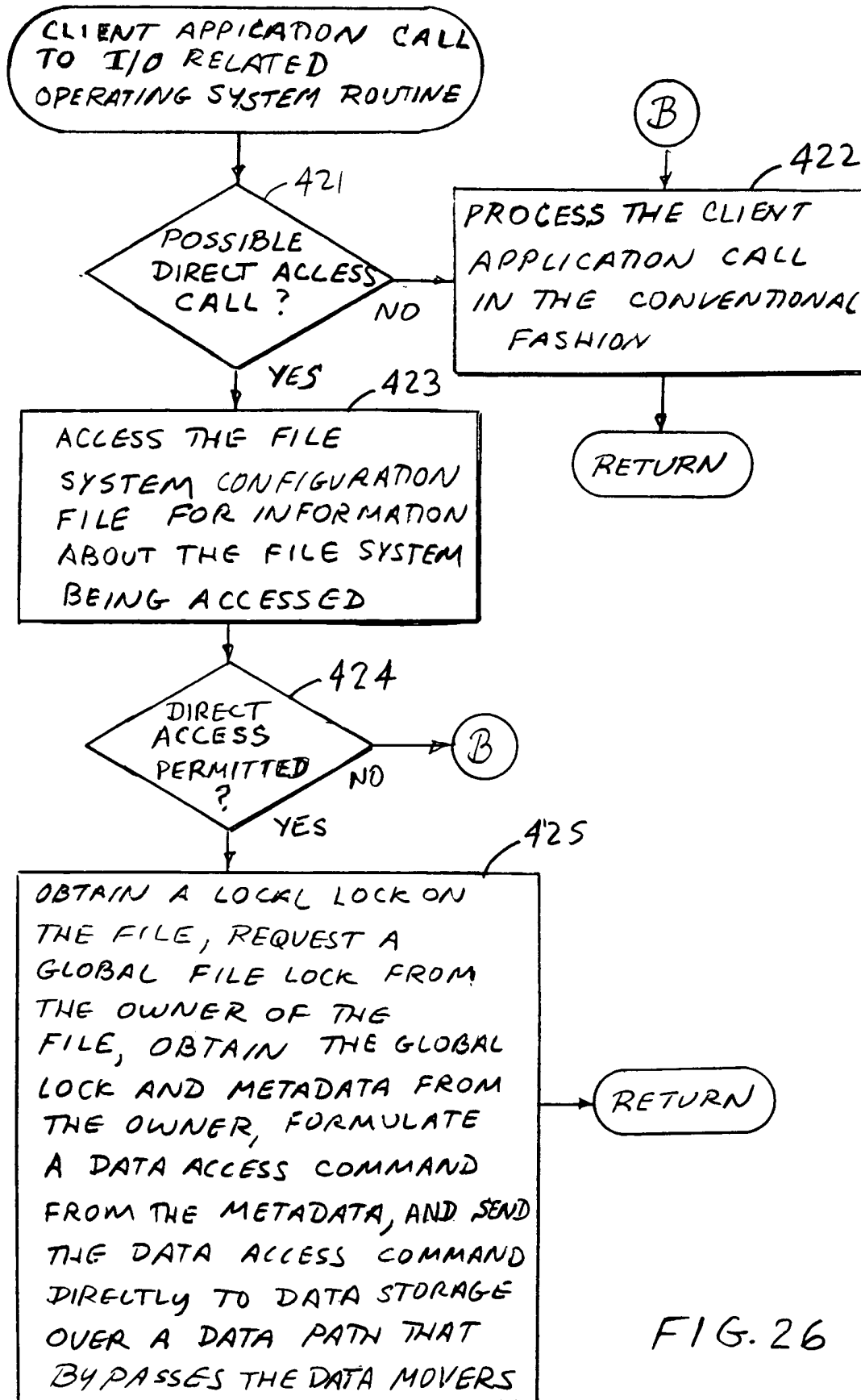


FIG. 26